

APPENDIX D

Field Sampling Standard Operating Procedures

Preparation

- Shoreline samples are collected every morning. Sample collection must be conducted during daylight hours after sunrise and before sunset.
- Check the posted monthly sample calendar for the day's duplicate stations, zero point samples, and any other special samples to be collected.
- Check the sterility results of the sample bottles that will be used. Use only sample bottles that have passed the sterility control QA check. (Also, make sure that the stripes on the autoclave tape are black).
 - The sterility results are recorded in an Equipment/Media Prep Log book under the date that the bottles are autoclaved.
 - The autoclave date will be written on the autoclave tape on top of the sample bottles. Record this date in the Equipment/Media Prep Log book for the date the sample bottles are used.
- Using a black lab marker, label the autoclave tape on the sterile sample bottles with the station number or sample name.
 - The North Beach Run includes stations XX-XX
 - The Central Beach Run includes stations XX-XX
 - The South Beach Run includes stations XX-XX, as well as the Palos Verdes Peninsula and Cabrillo Beach stations.
 - Use 250 mL bottles for shoreline samples.
- Extra sample bottles should be stored in each vehicle in case the sample collector needs them.
- Place sample bottles in the ice chest and fill the chest with ice until the bottom half of the sample bottles are covered.

Sample Collection

- When collecting a sample, make sure the sample is taken from the point in direct line with the sample location landmark. If a sample location is inaccessible or deemed to be unsafe and you cannot sample, please note this on the beach observation sheet. **REMEMBER, Safety Is Important!**

- For collecting samples at locations where there is a freshwater outlet, collect samples as close as safely possible to point zero (wave wash), but no further away than 10 meters down current of the storm drain or outlet.
- At open beaches without freshwater outlets (storm drains or coastal creeks), collect samples at ankle depth and on an incoming wave.
- Place the appropriate size sample bottle in the sampling pole. Just before collecting the sample, unscrew the bottle cap, being careful not to touch the lip of the bottle or the inside of the cap. Use aseptic techniques to avoid any contamination (i.e., do not touch the inner surfaces or lip edges of the bottle or cap).
- Hold the mouth of the bottle towards the surf and collect the sample from an **incoming** wave. Try to get as little sand in the sample bottle as possible. Leave enough headspace (about 1 inch) for later mixing of the sample. Avoid collecting sample in multiple sweeps and **avoid refilling** of the sample bottle.
- Tightly screw the cap back on the bottle, avoiding contamination. Record the time of sample collection on the *Compaq* Pocket PC or beach observation sheet.
- Place the sample bottle back into the ice chest. Make sure at least one-third of the bottom of the bottle is immersed in the ice. The maximum allowable transport time (time of sample collection to sample analysis) is 6 hours.
- Storm Drains and Zero-point Stations (see Appendix B: Sampling Stations/Locations)

Collect Reference Site Sample (Leo Carrillo/SMB-1-1)

- LACDHS will collect Leo Carrillo zero-point samples each Monday throughout the year.

Post Sample Collection

- Place samples in the refrigerator in the lab. Empty and clean out the ice chest and put it away.
- Log in the samples in the sample log-in book. Write the sample collection time and your initials for each sample collected.
- Make sure the beach observation sheet is completely filled out for that day. Do not forget the date and your initials.

- Vehicle maintenance:
 - Sweep out sand.
 - Remove trash.
 - Wash exterior and clean windows inside and out.
 - Gas vehicle if below half full.

QA/QC

- Please refer to Appendix I Quality Assurance/Quality Control for QA/QC procedures.

